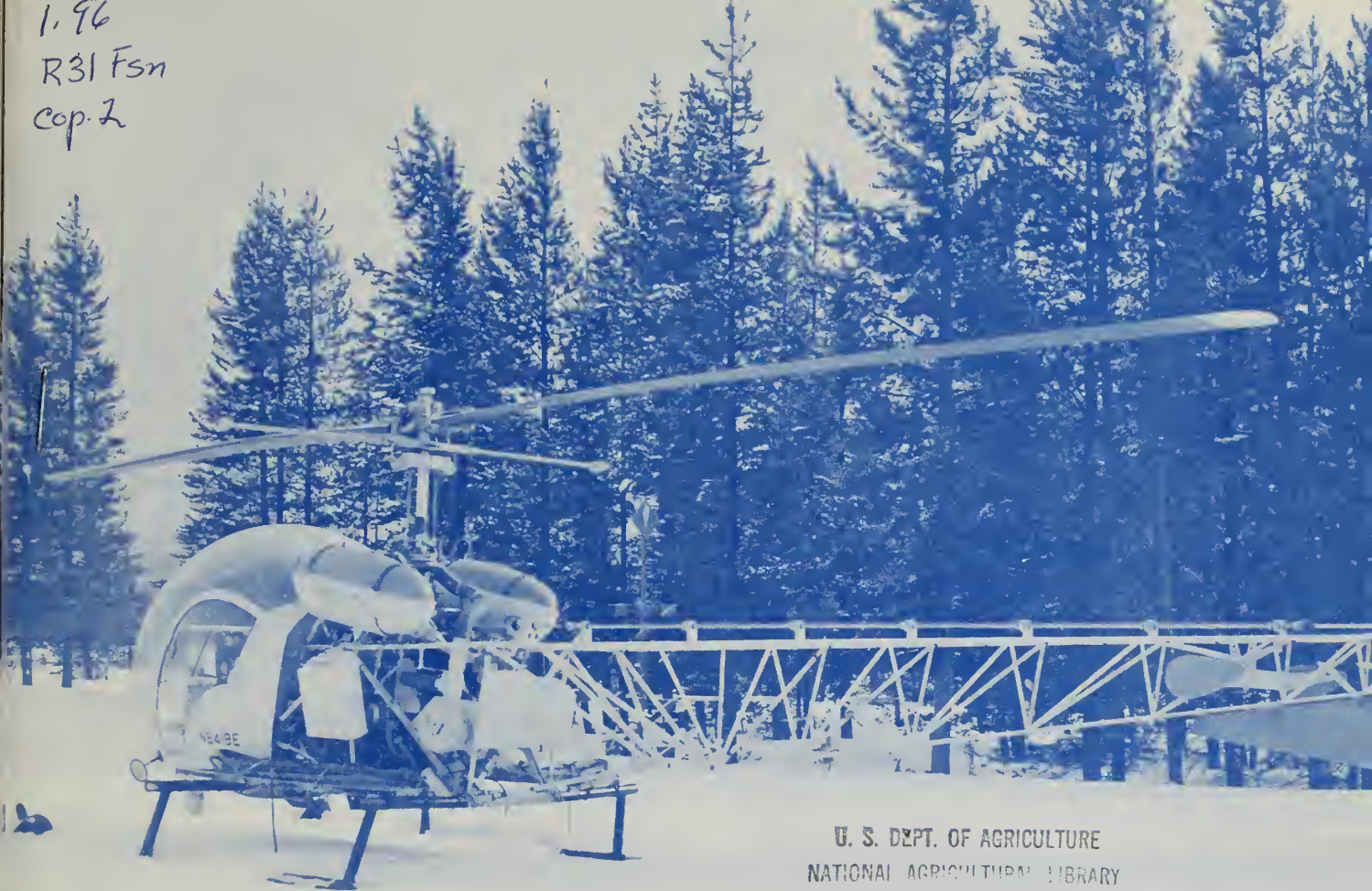


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C & R-PREP.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
NEVADA

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,
and

NEVADA DEPARTMENT of CONSERVATION and NATURAL RESOURCES
DIVISION of WATER RESOURCES

Data included in this report were obtained by the agencies named above
in cooperation with the Federal, State and private organizations listed
on the last page of this report.

AS OF
FEB. 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

| <u>REPORTS</u> | <u>ISSUED</u> | <u>LOCATION</u> | <u>COOPERATING WITH</u> |
|-------------------------|------------------------------------|------------------------|--|
| RIVER BASINS | | | |
| WESTERN UNITED STATES | MONTHLY (FEB.-MAY) | PORTLAND, OREGON | ALL COOPERATORS |
| BASIC DATA SUMMARY | OCTOBER 1 | PORTLAND, OREGON | ALL COOPERATORS |
| STATES | | | |
| ALASKA | MONTHLY (MAR.-MAY) | PALMER, ALASKA | ALASKA S.C.D. |
| ARIZONA | SEMI-MONTHLY (JAN. 15 - APR. 1) | PHOENIX, ARIZONA | SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION |
| COLORADO AND NEW MEXICO | MONTHLY (FEB.-MAY) | FORT COLLINS, COLORADO | COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER |
| IDAHO | MONTHLY (JAN.-JUNE) | BOISE, IDAHO | IDAHO STATE RECLAMATION ENGINEER |
| MONTANA | MONTHLY (JAN.-JUNE) | BOZEMAN, MONTANA | MONT. AGR. EXP. STATION |
| NEVADA | MONTHLY (JAN.-MAY) | RENO, NEVADA | NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES |
| OREGON | MONTHLY (JAN.-JUNE) | PORTLAND, OREGON | OREG. STATE UNIVERSITY OREGON STATE ENGINEER |
| UTAH | MONTHLY (JAN.-JUNE) | SALT LAKE CITY, UTAH | UTAH STATE ENGINEER |
| WASHINGTON | MONTHLY (FEB.-JUNE) | SPOKANE, WASHINGTON | WN. STATE DEPT. OF CONSERVATION |
| WYOMING | MONTHLY (FEB.-JUNE) | CASPER, WYOMING | WYOMING STATE ENGINEER |

PUBLISHED BY OTHER AGENCIES

| <u>REPORTS</u> | <u>ISSUED</u> | <u>AGENCY</u> |
|------------------|---------------------|---|
| BRITISH COLUMBIA | MONTHLY (FEB.-JUNE) | WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA |
| CALIFORNIA | MONTHLY (FEB.-MAY) | CALIF. DEPT. OF WATER RESOURCES, P.O. Box 388, SACRAMENTO, CALIF. |

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
NEVADA

Report prepared by

MANES BARTON

and

ROY E. MALSOR, JR.

SOIL CONSERVATION SERVICE
1479 SOUTH WELLS AVENUE
RENO, NEVADA

FEBRUARY 8, 1965

Issued by

CHARLES W. CLEARY, JR.

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
RENO, NEVADA

EILMO J. DE RICCO

~~**HUGH A. SHAMBERGER**~~

DIRECTOR
DEPARTMENT OF CONSERVATION AND
NATURAL RESOURCES
CARSON CITY, NEVADA

INDEX TO NEVADA SNOW COURSES (By Basins)

NUMBER NAME SEC. TWP. RGE. ELEV.

SNAKE RIVER BASIN

SNAKE RIVER

| | | | | | |
|---------|---------------------------|----|-----|-----|------|
| 15H1MA | BEAR CREEK | 31 | 46N | 58E | 7800 |
| 15H4MP* | BIG BEND | 30 | 45N | 56E | 6700 |
| 15H2 | FOX CREEK | 33 | 46N | 58E | 6800 |
| 15H13 | GOAT CREEK | 31 | 46N | 60E | 8800 |
| 15H5* | GOLD CREEK | 31 | 45N | 56E | 6600 |
| 15H15A | HUMMINGBIRD SPRINGS | 6 | 45N | 60E | 8945 |
| 14H1 | JACKS CREEK | 6 | 42N | 62E | 7000 |
| 15H14 | POLE CREEK RANGER STATION | 13 | 46N | 59E | 8330 |
| 15H18a | RED POINT | 15 | 47N | 61E | 7940 |
| 15H3A | 76 CREEK | 6 | 44N | 58E | 7100 |
| 15H19a | STAG MTN. | 29 | 41N | 58E | 7800 |

OWYHEE RIVER

| | | | | | |
|---------|----------------------|----|-----|-----|------|
| 15H4MP | BIG BEND | 30 | 45N | 56E | 6700 |
| 17H2* | BUCKSKIN, LOWER | 25 | 45N | 39E | 6700 |
| 17H1* | BUCKSKIN, UPPER | 11 | 45N | 39E | 7200 |
| 16H6a | COLUMBIA BASIN | 31 | 44N | 53E | 6650 |
| 16H7* | FRY CANYON | 31 | 43N | 54E | 6700 |
| 15H5 | GOLD CREEK | 31 | 45N | 56E | 6600 |
| 17H4* | GRANITE PEAK | 22 | 44N | 39E | 7800 |
| 16H1M | JACK CREEK, LOWER | 18 | 42N | 53E | 6800 |
| 16H2A | JACK CREEK, UPPER | 9 | 42N | 53E | 7250 |
| 16H4 | JACKS PEAK | 28 | 42N | 53E | 8420 |
| 16H5 | LAUREL CANYON | 20 | 45N | 53E | 6700 |
| 17G4a | LOUSE CANYON (OREG.) | 27 | 40S | 44E | 6440 |
| 17H3* | MARTIN CREEK | 18 | 44N | 40E | 6700 |
| 15H6MP* | RODEO FLAT | 36 | 43N | 53E | 6800 |
| 15H19a* | STAG MTN. | 29 | 40N | 50E | 7700 |
| 15H9MP | TAYLOR CANYON | 35 | 39N | 53E | 6200 |
| 16H7a* | TOE JAM | 29 | 40N | 50E | 7700 |
| 15H8* | TREMEWAN RANCH | 9 | 39N | 55E | 5700 |

INTERIOR

UPPER HUMBOLDT RIVER

| | | | | | |
|---------|--------------------|----|-----|-----|------|
| 15J17a | AMERICAN BEAUTY | 32 | 31N | 58E | 7800 |
| 15H1MA | BEAR CREEK | 31 | 46N | 58E | 7800 |
| 15H4MP* | BIG BEND | 30 | 45N | 56E | 6700 |
| 16H6a | COLUMBIA BASIN | 31 | 44N | 53E | 6650 |
| 15J12A | CORRAL CANYON | 27 | 28N | 57E | 8500 |
| 15J1MP | DOORSEY BASIN | 28 | 35N | 60E | 8100 |
| 15J3 | ORY CREEK | 5 | 34N | 60E | 6500 |
| 15H2* | FOX CREEK | 33 | 46N | 58E | 6800 |
| 15H7 | FRY CANYON | 31 | 43N | 54E | 6700 |
| 15H5* | GOLD CREEK | 31 | 45N | 56E | 6600 |
| 15J9MP | GREEN MOUNTAIN | 23 | 29N | 57E | 8000 |
| 15J10 | HARRISON PASS #1 | 9 | 28N | 57E | 6600 |
| 15J11 | HARRISON PASS #2 | 16 | 28N | 57E | 7400 |
| 16H1M* | JACK CREEK, LOWER | 18 | 42N | 53E | 6800 |
| 16H2A* | JACK CREEK, UPPER | 9 | 42N | 53E | 7250 |
| 16H4* | JACKS PEAK | 28 | 42N | 53E | 8420 |
| 15J4 | LAMOILLE #1 | 15 | 32N | 58E | 7100 |
| 15J5 | LAMOILLE #2 | 14 | 32N | 58E | 7300 |
| 15J6M | LAMOILLE #3 | 24 | 32N | 58E | 7700 |
| 15J7 | LAMOILLE #4 | 19 | 32N | 59E | 8000 |
| 15J8P | LAMOILLE #5 | 31 | 32N | 59E | 8700 |
| 15J16a | ROBINSON LAKE | 23 | 33N | 59E | 9200 |
| 15H6MP | RODEO FLAT | 36 | 43N | 53E | 6800 |
| 15J2 | RYAN RANCH | 1 | 34N | 59E | 5800 |
| 15H19a* | STAG MTN. | 29 | 40N | 50E | 7700 |
| 15H3A* | 76 CREEK | 6 | 44N | 58E | 7100 |
| 15H9MP* | TAYLOR CANYON | 35 | 39N | 53E | 6200 |
| 16H7a* | TOE JAM | 29 | 40N | 50E | 7700 |
| 15H8 | TREMEWAN RANCH | 9 | 39N | 55E | 5700 |
| 15H10P | TROUT CREEK, LOWER | 28 | 37N | 61E | 6900 |
| 15H11A | TROUT CREEK, UPPER | 4 | 36N | 61E | 8500 |

LOWER HUMBOLDT RIVER

| | | | | | |
|--------|-----------------------|----|-----|-----|------|
| 17K1 | 8IG CREEK CAMP GROUND | 10 | 17N | 43E | 6600 |
| 17K2 | 8IG CREEK MINE | 23 | 17N | 43E | 7600 |
| 17K3 | 8IG CREEK, UPPER | 26 | 17N | 43E | 8000 |
| 17H2 | BUCKSKIN, LOWER | 25 | 45N | 39E | 6700 |
| 17H1 | BUCKSKIN, UPPER | 11 | 45N | 39E | 7200 |
| 17J2 | GOLCONDA #2 | 22 | 35N | 39E | 6000 |
| 17H4 | GRANITE PEAK | 22 | 44N | 39E | 7800 |
| 17H5 | LAMANCE CREEK | 13 | 42N | 38E | 6000 |
| 17L1 | LOWER CORRAL | 12 | 11N | 40E | 7500 |
| 17H3 | MARTIN CREEK | 18 | 44N | 40E | 6700 |
| 16H3AP | MIOAS | 18 | 39N | 46E | 7200 |
| 16H7 | TOE JAM | 29 | 40N | 50E | 7700 |
| 17L2 | UPPER CORRAL | 20 | 11N | 41E | 8500 |

EASTERN NEVADA

| | | | | | |
|-------|------------------|----|-----|-----|------|
| 14L1 | BAKER #1 | 29 | 13N | 69E | 7950 |
| 14L2 | BAKER #2 | 30 | 13N | 69E | 8950 |
| 14L3 | BAKER #3 | 25 | 13N | 88E | 9250 |
| 14K2 | BERRY CREEK | 26 | 17N | 65E | 9100 |
| 14K1 | BIRD CREEK | 34 | 19N | 65E | 7500 |
| 15J13 | CAVE CREEK | 25 | 27N | 57E | 7500 |
| 15J14 | HAGER CANYON | 34 | 27N | 57E | 8000 |
| 15J15 | HOLE-IN-MTN | 6 | 35N | 61E | 7900 |
| 14K8 | KALAMAZOO CREEK | 34 | 20N | 65E | 7400 |
| 14K3 | MURRAY SUMMIT | 25 | 16N | 62E | 7250 |
| 15K1 | ROBINSON SUMMIT | 34 | 18N | 61E | 7600 |
| 14K7 | SILVER CREEK #2 | 30 | 16N | 69E | 8000 |
| 14K5 | WARD MOUNTAIN #2 | 25 | 15N | 62E | 7875 |
| 15L1* | WHITE RIVER #1 | 31 | 13N | 59E | 7400 |

CENTRAL GREAT BASIN

| | | | | | |
|--------|---------------------|----|-----|-----|-------|
| 18M2 | CAMPITO MTN. (CAL.) | 19 | 55 | 35E | 10200 |
| 15N2 | CLARK CANYON | 8 | 19S | 56E | 9000 |
| 18G6a* | OENIO CREEK (OREG.) | 14 | 41S | 34E | 6000 |
| 18M1 | MONTGOMERY PASS | 4 | 1N | 33E | 7100 |
| 18M3a | PINCHOT CREEK | 28 | 1N | 33E | 9300 |
| 18M4a | PIUTE PASS (CAL.) | 33 | 4S | 33E | 11700 |
| 15N1 | TROUGH SPRINGS | 23 | 18S | 55E | 8500 |

NUMBER NAME SEC. TWP. RGE. ELEV.

NORTHERN GREAT BASIN

| | | | | | |
|-------|-----------------------|----|-----|-----|------|
| 19H1 | BALD MOUNTAIN | 17 | 45N | 21E | 6720 |
| 20H5 | BARBER CREEK | 23 | 39N | 18E | 6500 |
| 20H6 | CEDAR PASS | 12 | 43N | 14E | 7100 |
| 18H1 | OISASTER PEAK | 8 | 47N | 34E | 6500 |
| 20H3a | OISAL SWAMP (CAL.) | 31 | 48N | 22E | 7000 |
| 20H7 | EAGLE PEAK | 35 | 40N | 15E | 7200 |
| 19H3 | 49-MTN | 7 | 42N | 19E | 8000 |
| 19H2 | HAYS CANYON | 1 | 39N | 18E | 6400 |
| 19H4a | LITTLE BALLY MTN | 8 | 45N | 19E | 8000 |
| 17G5a | OREGON CANYON (OREG.) | 9 | 40S | 40E | 7240 |
| 17H6a | QUINN RIDGE | 9 | 47N | 41E | 6300 |
| 20H4 | RESERVATION CREEK | 12 | 48N | 15E | 5900 |
| 18G5a | TROUT CREEK (OREG.) | 10 | 41S | 38E | 7800 |

LAKE TAHOE

| | | | | | |
|--------|-----------------------|----|-----|-----|------|
| 19L14 | DAGGETTS PASS | 19 | 13N | 19E | 7350 |
| 20L5 | ECHO SUMMIT (CAL.) | 6 | 11N | 18E | 7450 |
| 19L2 | FREEL BENCH (CAL.) | 36 | 12N | 18E | 7300 |
| 19K8 | GLENBROOK #2 | 13 | 14N | 18E | 6900 |
| 19L3M | HAGANS MEADOW (CAL.) | 36 | 12N | 18E | 8000 |
| 20L4 | LAKE LUCILLE (CAL.) | 28 | 12N | 17E | 8200 |
| 19K4M | MARLETTE LAKE | 13 | 17N | 19E | 8000 |
| 19K2* | MT. ROSE | 7 | 17N | 19E | 9000 |
| 20L3 | RICHARDSONS #2 (CAL.) | 6 | 12N | 18E | 6500 |
| 20L1 | RUBICON #1 (CAL.) | 6 | 13N | 17E | 8100 |
| 20L2 | RUBICON #2 (CAL.) | 6 | 13N | 17E | 7500 |
| 20K16 | TAHOE CITY (CAL.) | 8 | 15N | 17E | 6250 |
| 19L1 | UPPER TRUCKEE (CAL.) | 21 | 12N | 18E | 6400 |
| 20K17M | WARD CREEK (CAL.) | 21 | 15N | 16E | 7000 |

TRUCKEE RIVER

| | | | | | |
|---------|---------------------------|----|-----|-----|------|
| 20K14 | BOCA #2 (CAL.) | 28 | 18N | 17E | 5900 |
| 20K22 | BRICKWAY SUMMIT (CAL.) | 3 | 17N | 16E | 7100 |
| 20K21 | CONNER PARK #2 (CAL.) | 18 | 17N | 16E | 6000 |
| 20K10* | CONNER SUMMIT (CAL.) | 25 | 17N | 14E | 8900 |
| 20K7* | FORDYCE LAKE (CAL.) | 34 | 18N | 13E | 6500 |
| 20K8 | FURNACE FLAT (CAL.) | 10 | 17N | 13E | 6700 |
| 20K4M | INDEPENDENCE CAMP (CAL.) | 34 | 19N | 15E | 7000 |
| 20K3 | INDEPENDENCE CREEK (CAL.) | 14 | 19N | 15E | 6500 |
| 20K5 | INDEPENDENCE LAKE (CAL.) | 9 | 18N | 15E | 8450 |
| 19K3 | LITTLE VALLEY | 17 | 18N | 19E | 6300 |
| 19K2 | MT. ROSE | 7 | 17N | 19E | 9000 |
| 20K6 | SAGE HEN CREEK (CAL.) | 7 | 18N | 16E | 6500 |
| 20K19 | SOUAW VALLEY #2 (CAL.) | 6 | 15N | 16E | 7500 |
| 20K18* | TAHOE CITY (CAL.) | 6 | 15N | 17E | 6250 |
| 20K13M | TRUCKEE #2 (CAL.) | 22 | 17N | 16E | 6400 |
| 20K17M* | WARD CREEK (CAL.) | 21 | 15N | 18E | 7000 |
| 20K2 | WEBBER LAKE (CAL.) | 29 | 19N | 14E | 7000 |
| 20K1* | WEBBER PEAK (CAL.) | 30 | 19N | 14E | 8000 |

CARSON RIVER

| | | | | | |
|--------|---------------------------|----|-----|-----|------|
| 19L5 | BLUE LAKES (CAL.) | 30 | 9N | 19E | 8000 |
| 19L4 | CARSON PASS, UPPER (CAL.) | 22 | 10N | 18E | 8600 |
| 19K5 | CLEAR CREEK | 6 | 14N | 19E | 7300 |
| 19L19a | EBBETTS PASS (CAL.) | 17 | 8N | 20E | 8700 |
| 19L6a | POISON FLAT (CAL.) | 25 | 8N | 21E | 7900 |
| 19L16a | UPPER FISH VALLEY (CAL.) | 18 | 7N | 22E | 8050 |
| 19L18a | WET MEADOWS LAKE (CAL.) | 26 | 9N | 19E | 8100 |

WALKER RIVER

| | | | | | |
|--------|------------------------|----|----|-----|------|
| 19L11 | BUCKEYE FORKS (CAL.) | 20 | 4N | 23E | 8500 |
| 19L10 | BUCKEYE ROUGHS (CAL.) | 15 | 4N | 23E | 7900 |
| 19L12A | CENTER MOUNTAIN (CAL.) | 4 | 3N | 23E | 9400 |
| 18L1 | LAPON MEADOW | 36 | 8N | 28E | 9000 |
| 19L8 | LEAVITT MEADOWS (CAL.) | 4 | 5N | 22E | 7200 |
| 19L17a | LOBDELL LAKE | 20 | 7N | 24E | 9200 |
| 18L2 | MT. GRANT | 23 | 8N | 28E | 9000 |
| 19L7M | SONORA PASS (CAL.) | 1 | 5N | 21E | 8800 |
| 19M1* | TIOPA PASS (CAL.) | 30 | 1N | 25E | 9900 |
| 19L13M | VIRGINIA LAKES (CAL.) | 5 | 2N | 25E | 9500 |
| 19L9 | WILLOW FLAT (CAL.) | 21 | 5N | 23E | 8250 |

COLORADO

LOWER COLORADO RIVER

| | | | | | |
|------|-------------------|----|-----|-----|------|
| 15N5 | KYLE CANYON | 26 | 19S | 56E | 8200 |
| 15N4 | LEE CANYON #1 | 10 | 19S | 56E | 8300 |
| 15N3 | LEE CANYON #2 | 9 | 19S | 56E | 9000 |
| 15N8 | LEE CANYON #3 | 10 | 19S | 56E | 8400 |
| 14M1 | MATHEW CANYON | 11 | 5S | 70E | 6000 |
| 14M2 | PINE CANYON | 11 | 6S | 69E | 6200 |
| 15N7 | RAINBOW CANYON #2 | 6 | 20S | 57E | 8100 |
| 15L1 | WHITE RIVER #1 | 31 | 13N | 59E | 7400 |

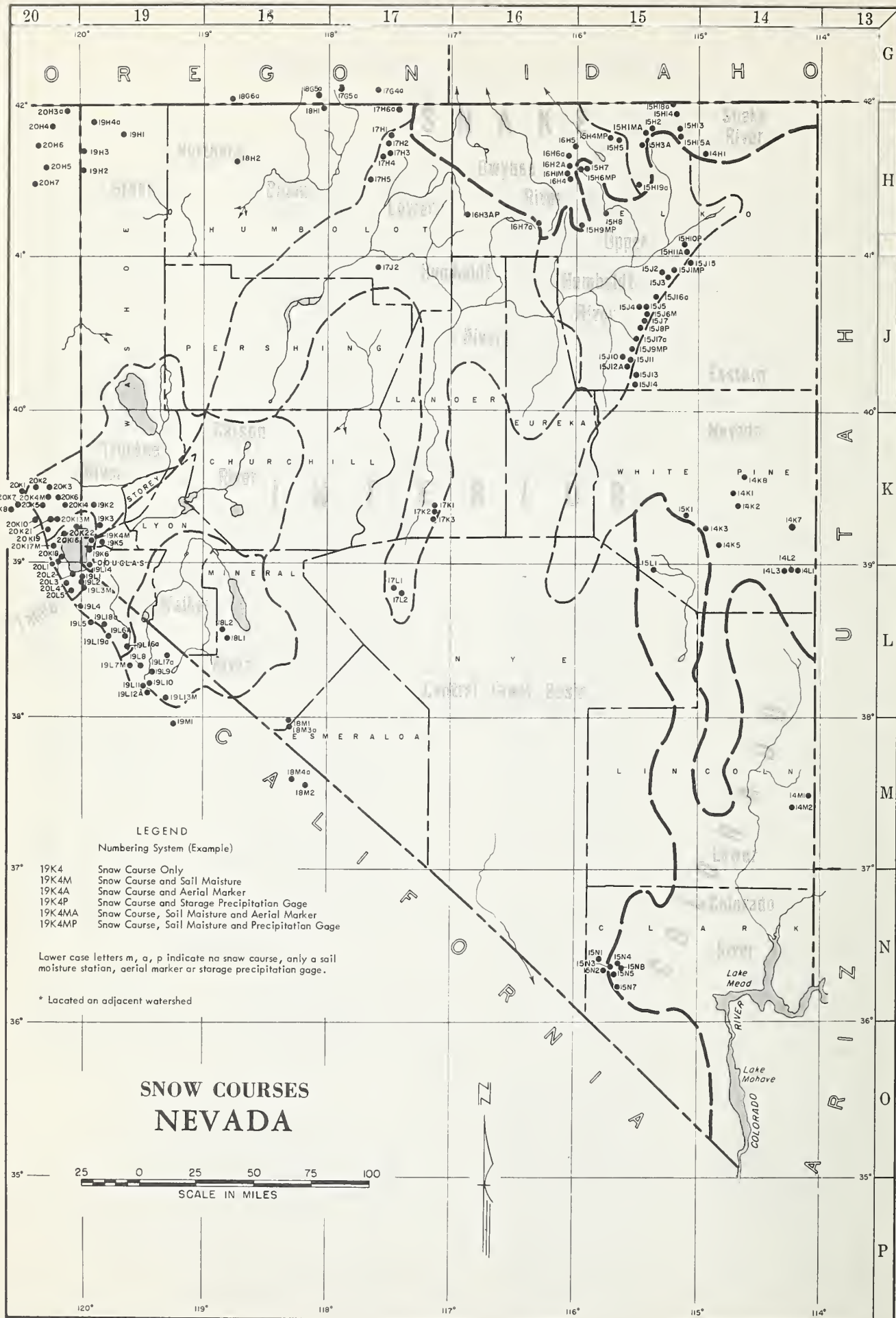
LEGEND

NUMBERING SYSTEM (EXAMPLE)

| | |
|--------|---|
| 19K4 | SNOW COURSE ONLY |
| 19K4M | SNOW COURSE AND SOIL MOISTURE |
| 19K4A | SNOW COURSE AND AERIAL MARKER |
| 19K4P | SNOW COURSE AND STORAGE PRECIPITATION GAGE |
| 19K4MA | SNOW COURSE, SOIL MOISTURE AND AERIAL MARKER |
| 19K4MP | SNOW COURSE, SOIL MOISTURE AND PRECIPITATION GAGE |

LOWER CASE LETTERS m, a, p, INDICATE NO SNOW COURSE, ONLY A SOIL MOISTURE STATION, AERIAL MARKER OR STORAGE PRECIPITATION GAGE.

* LOCATED ON ADJACENT WATERSHED



LEGEND
Numbering System (Example)

| | | |
|-----|--------|---|
| 37° | 19K4 | Snow Course Only |
| | 19K4M | Snow Course and Soil Moisture |
| | 19K4A | Snow Course and Aerial Marker |
| | 19K4P | Snow Course and Storage Precipitation Gage |
| | 19K4MA | Snow Course, Soil Moisture and Aerial Marker |
| | 19K4MP | Snow Course, Soil Moisture and Precipitation Gage |

Lower case letters m, a, p indicate no snow course, only a soil moisture station, aerial marker or storage precipitation gage.

* Located on adjacent watershed

SNOW COURSES NEVADA



WATER SUPPLY OUTLOOK

FOR NEVADA

February 1, 1965

* * * * *

* Water users in western and northern Nevada will have a very *
* good to excellent 1965 irrigation season water supply. *
* Reservoir storage is excellent at 136 percent of the Febru- *
* ary 1 average and 66 percent of capacity. Mountain soils *
* are very wet. The south-central and southern Nevada snow *
* pack is below normal as it was this date last year. With *
* normal conditions the next two months east slope Sierra *
* streams from the Walker on the south to Surprise Valley on *
* the north will flow in the 125 to 150 percent of average *
* range. At times, dependent on melt conditions during the *
* April-July runoff period, stream flow may exceed water *
* users needs. *

* * * * *

Since the first week in January, storms have diminished from their high intensity and frequency to more normal rates. The large quantities of snow deposited during the mid-December-January 10 storms coupled with the snowfall during the last three weeks of January have left the Sierra shrouded with an excellent snowpack. This pattern persists across the northern part of Nevada as far east as the Santa Rosa Mountains north of Winnemucca. The mountain snow pack in Elko County is good but not exceptional. Southern Nevada snow pack is only fair.

February 1, 1965 snow surveys were taken at 50 snow courses and 26 aerial markers in, or adjacent to, Nevada. The water content of this February 1 snow pack is 168 percent of the February 1, 1948-62 average in the Tahoe-Truckee basin; 198 percent of average in the Carson-Walker basins; and 93 percent of average in the Humboldt basin above Palisade. Most snow courses on the east slope Sierra are at, or slightly above, their April 1 averages. Greater east slope Sierra February 1 snow pack water content values were measured in 1923, 1932, 1956, and the record high year-1952.

Assuming that precipitation and temperature will be near average from the present time until the end of the forecast period, April-July 1965 runoff forecasts for a selected group of streams are shown on the following page.



| Stream | April-July, Streamflow Thousand Acre-Feet | | | | |
|--|---|--------------------------|-------------------------------|--------------------|------|
| | Forecast 1965 | 15-Yr. Av. 1948-62 | 1965 as % of 15-Yr. Av. | Measured Runoff | |
| | | | | 1964 | 1963 |
| Owyhee River nr. Gold Cr., Nev.* | 24 | 22 | 109 | 21 | 15 |
| Owyhee River nr. Owyhee, Nev.* | 80 | 74 | 108 | 78 | 70 |
| Humboldt River at Palisade, Nev. | 225 | 173 | 130 | 271 | 216 |
| West Walker below E. Fork nr. Coleville, California | 210 | 140 | 150 | 86 | 173 |
| Virgin River at Virgin, Utah** | 35 | 43 | 81 | 37 | 18 |

* Corrected for storage in Wild Horse Reservoir.

** April-June forecast furnished by SCS, Salt Lake City, Utah.

Reservoirs gained in excess of their usual January rate due to the recession of the flood flows of early January. In aggregate Nevada's seven principal reservoirs gained 126,000 acre-feet of stored water compared to their January average of 48,000 acre-feet and are 136 percent of their February 1 average. Exclusive of Lake Mead and Lake Mohave, and with the possible exception of Wild Horse which was drained last summer, all Nevada reservoirs are expected to fill to capacity this year. Baring extremely below normal precipitation the remainder of the 1965 water-year an above average stored water carry-over into the 1966 water-year can be expected.

Mountain soils are very wet in northern and western Nevada. Little, if any, snow melt water will be lost to the soil mantle.



NEVADA
STATUS OF RESERVOIR STORAGE
FEBRUARY 1, 1965

| BASIN AND STREAM | RESERVOIR | USABLE CAPACITY (1000 AF) | USABLE STORAGE - 1000 ACRE FEET | | | |
|---------------------|------------|---------------------------------|---------------------------------|--------|--------|--------------------------------------|
| | | | 1965 | 1964 | 1963 | FEBRUARY 1 15-YR. AVE. 1948-62 |
| Owyhee | Wild Horse | 33 | 5* | 25 | 18 | 12 |
| Lower Humboldt | Rye Patch | 179 | 116 | 75 | 75 | 56 |
| Colorado | Mohave | 1,810 | 1,680 | 1,696 | 1,682 | 1,319** |
| Colorado | Mead | 27,217 | 11,289 | 15,448 | 22,676 | 17,402 |
| Tahoe | Tahoe | 732 | 510 | 379 | 175 | 378 |
| Truckee | Boca | 41 | 3 | 8 | 26 | 8 |
| Truckee | Prosser*** | 30 | 9 | 10 | 11 | -- |
| Carson | Lahontan | 286 | 212 | 213 | 193 | 164 |
| West Walker | Topaz | 59 | 39 | 46 | 35 | 28 |
| East Walker | Bridgeport | 42 | 26 | 38 | 36 | 24 |

* Reservoir drained during summer to effect repairs to dam.

** 1950-62

*** Flood control use allocation of 20,000 A.F. between November 1 and April 10; storage began January 30, 1963.

TOTAL RESERVOIR STORAGE

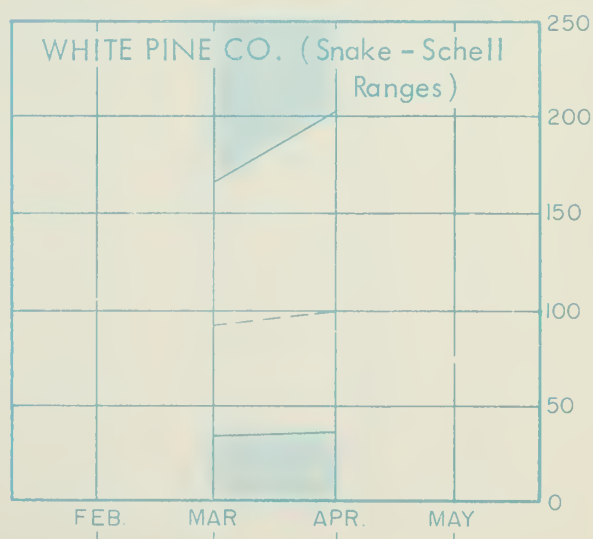
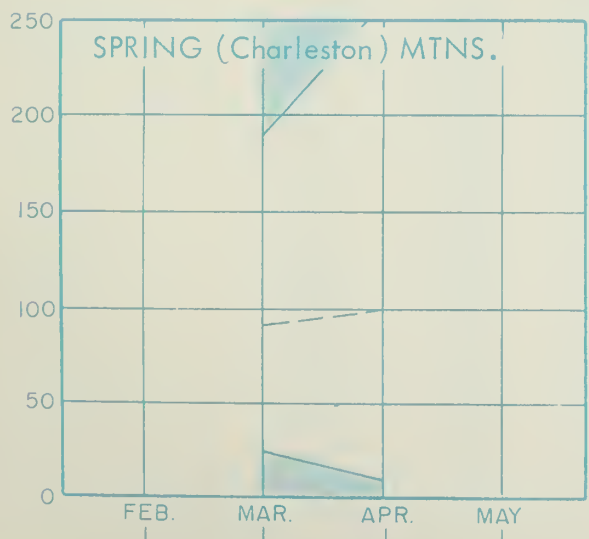
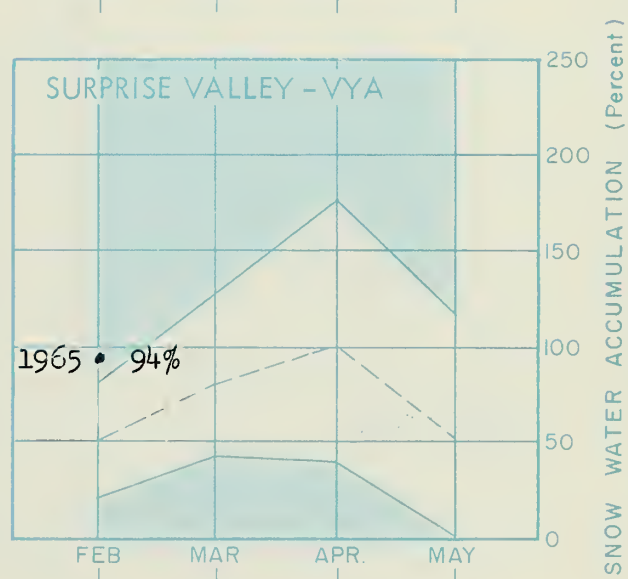
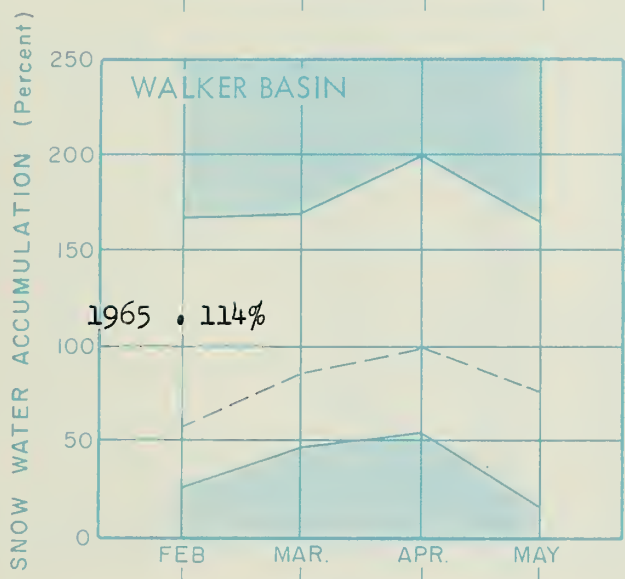
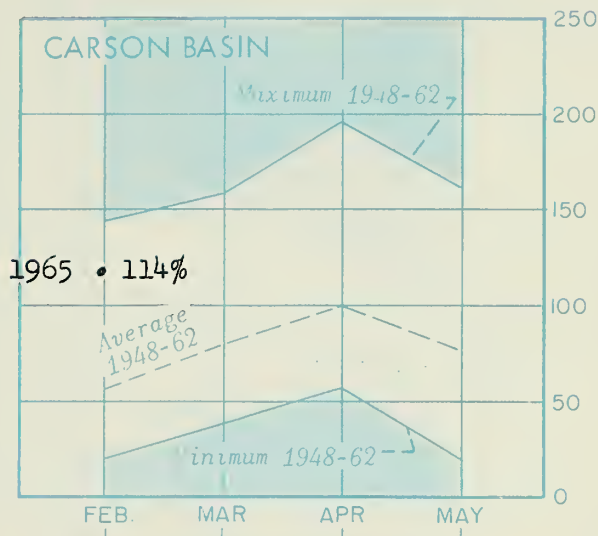
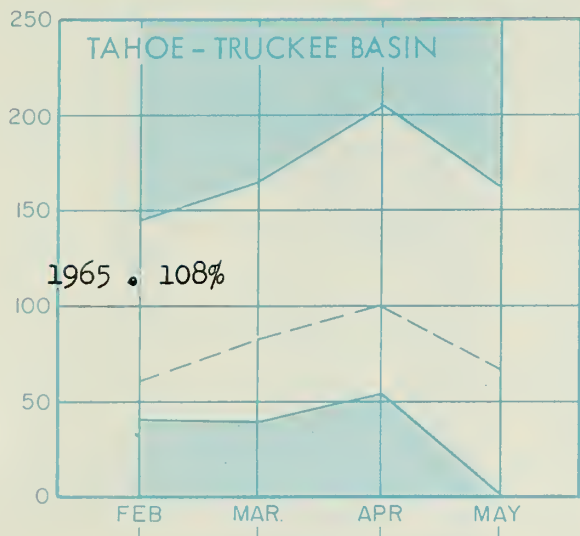
Developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz,
and Bridgeport Reservoirs in 1000's Acre Feet

| MONTH | 1959-60 | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 | AVERAGE 1948-62 |
|-----------------------------|---------|---------|---------|---------|---------|---------|--------------------|
| October 1 | 489 | 263 | 65 | 345 | 707 | 498 | 572 |
| January 1 | 367 | 206 | 57 | 419 | 756 | 785 | 622 |
| February 1 | 398 | 218 | 73 | 558 | 784 | 911 | 670 |
| March 1 | 494 | 254 | 210 | 696 | 777 | | 725 |
| April 1 | 592 | 285 | 318 | 769 | 775 | | 776 |
| May 1 | 632 | 300 | 499 | 844 | 814 | | 834 |
| TOTAL USABLE CAPACITY 1,372 | | | | | | | |

SNOW WATER ACCUMULATION IN NEVADA

Percent of average maximum accumulation

As of February 1, 1965

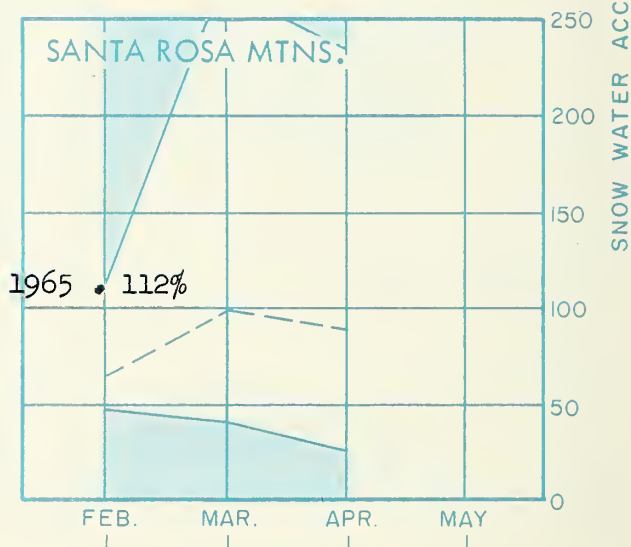
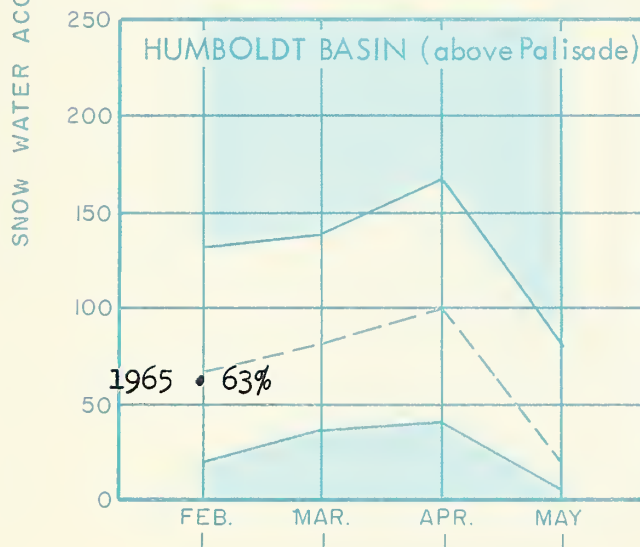
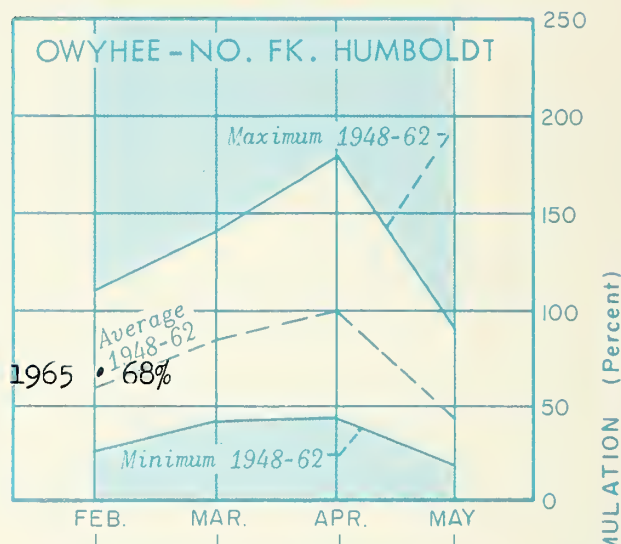
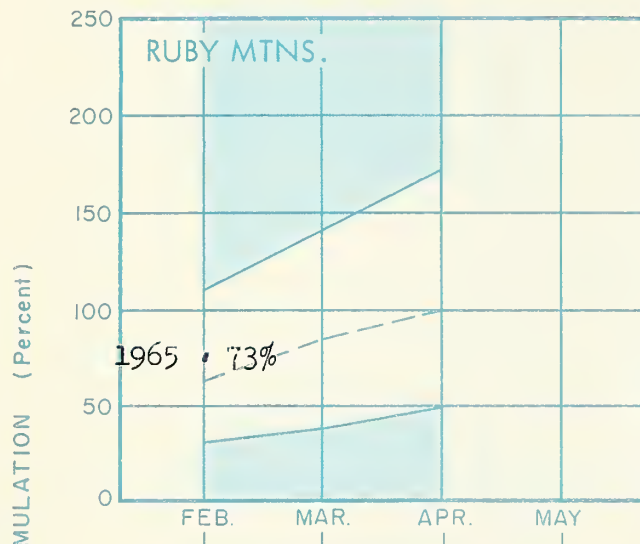


Continued

SNOW WATER ACCUMULATION IN NEVADA

Percent of average maximum accumulation

As of February 1, 1965



NEVADA SNOW SURVEYS FEBRUARY 1, 1965

| DRAINAGE BASIN AND SNOW COURSE | No. | Elev. (Ft.) | Date of Survey | 1965 | | P a s t R e c o r d | | |
|--------------------------------------|--------|----------------|----------------------|------------------------|---------------------------|---------------------|------|-----------------|
| | | | | Snow Depth (In.) | Water Content (In.) | Water Content (In.) | | 1948-62 Ave. |
| | | | | | | 1964 | 1963 | |
| <u>SNAKE RIVER</u> | | | | | | | | |
| Bear Creek | 15H1MA | 7800 | 2/1 | 55 | 21.1e | 11.5e | 4.5e | 11.7* |
| +Big Bend | 15H4M | 6700 | 1/29 | 30 | 8.7 | 8.3 | T | 6.4* |
| Goat Creek | 15H13A | 8800 | 2/1 | 37 | 14.2e | 10.1e | 2.8e | 10.0* |
| +Gold Creek | 15H5 | 6600 | 1/29 | 20 | 4.4 | 7.0 | 0.0 | 4.7* |
| Hummingbird Springs | 15H15A | 8945 | 2/1 | 90 | 27.3e | 13.3e | 5.4e | 10.7* |
| Merritt Mountain | 15H20a | 7000 | 2/1 | 6 | 1.8e | New Aerial Marker | | |
| Pole Creek R. S. | 15H14 | 8330 | 1/26 | 54 | 16.4 | 13.3 | 6.8 | 10.5* |
| Red Point | 15H18a | 7940 | 2/1 | 18 | 6.9e | 11.5e | 1.8e | -- |
| 76-Creek | 15H3A | 7100 | 2/1 | 27 | 8.1e | 6.8e | T e | 7.4* |
| Stag Mountain | 15H19a | 7700 | 2/1 | 12 | 3.6e | 2.9e | -- | -- |
| <u>OWYHEE RIVER</u> | | | | | | | | |
| +Bear Creek | 15H1MA | 7800 | 2/1 | 55 | 21.1e | 11.5e | 4.5e | 11.7* |
| Big Bend | 15H4M | 6700 | 1/29 | 30 | 8.7 | 8.3 | T | 6.4* |
| Columbia Basin | 16H6a | 6650 | 2/1 | 18 | 5.2e | 8.8e | -- | -- |
| Fawn Creek | 16H8a | 7000 | 2/1 | 6 | 1.5e | New Aerial Marker | | |
| +Fry Canyon | 15H7 | 6700 | 1/29 | 20 | 5.8 | 5.5 | T | 6.0* |
| Gold Creek | 15H5 | 6600 | 1/29 | 20 | 4.4 | 7.0 | 0.0 | 4.7* |
| +Granite Peak | 17H4 | 7800 | 1/28 | 48 | 17.0 | 6.2 | 6.8 | 7.5* |
| Jack Creek - Upper | 16H2A | 7250 | 2/1 | 12 | 3.5e | 2.3e | T | 6.8* |
| Laurel Draw | 16H5 | 6700 | 1/27 | 23 | 5.0 | 6.8 | 0.0 | 5.2* |
| +Martin Creek | 17H3 | 6700 | 1/28 | 29 | 10.0 | 5.5 | T | 5.8* |
| +Rodeo Flat | 15H6M | 6800 | 1/29 | 16 | 4.6 | 4.8 | T | 5.6* |
| +76-Creek | 15H3A | 7100 | 2/1 | 27 | 8.1e | 6.8e | T e | 7.4* |
| Taylor Canyon | 15H9M | 6200 | 1/29 | 16 | 3.8 | 4.3 | T | 3.9* |
| +Toe Jam | 16H7a | 7700 | 2/1 | 19 | 5.5e | 5.5e | -- | -- |
| +Tremewan Ranch | 15H8 | 5700 | 1/29 | 5 | 1.5 | 3.2 | 0.0 | 1.7* |
| <u>UPPER HUMBOLDT RIVER</u> | | | | | | | | |
| American Beauty | 15J17a | 7800 | 2/1 | 11 | 3.8e | 5.4e | -- | -- |
| +Bear Creek | 15H1MA | 7800 | 2/1 | 55 | 21.1e | 11.5e | 4.5e | 11.7* |
| +Big Bend | 15H4M | 6700 | 1/29 | 30 | 8.7 | 8.3 | T | 6.4* |
| Corral Canyon | 15J12A | 8500 | Marker Down | | | 6.5e | -- | -- |
| Fry Canyon | 15H7 | 6700 | 1/29 | 20 | 5.8 | 5.5 | T | 6.0* |
| +Gold Creek | 15H5 | 6600 | 1/29 | 20 | 4.4 | 7.0 | 0.0 | 4.7* |
| +Jack Creek - Upper | 16H2A | 7250 | 2/1 | 12 | 3.5e | 2.3e | T | 6.8* |
| Lamoille #1 | 15J4 | 7100 | 2/1 | 21 | 6.7 | 6.1 | 1.6 | 6.9* |
| Lamoille #2 | 15J5 | 7200 | 2/1 | 17 | 5.9 | 5.5 | 2.4 | 6.4* |
| Lamoille #3 | 15J6 | 7700 | 2/1 | 30 | 10.2 | 7.0 | 3.8 | 8.3* |
| Lamoille #4 | 15J7 | 8000 | 2/1 | 48 | 17.0 | 9.3 | 5.4 | 12.0* |
| Lamoille #5 | 15J8 | 8700 | 2/1 | 58 | 23.6 | 12.6 | 9.1 | 17.8* |
| Rodeo Flat | 15H6M | 6800 | 1/29 | 16 | 4.6 | 4.8 | T | 5.6* |
| +76-Creek | 15H3A | 7100 | 2/1 | 27 | 8.1e | 6.8e | T e | 7.4* |
| +Stag Mountain | 15H19a | 7700 | 2/1 | 12 | 3.6e | 2.9e | -- | -- |
| +Taylor Canyon | 15H9M | 6200 | 1/29 | 16 | 3.8 | 4.3 | T | 3.9* |
| +Toe Jam | 16H7a | 7700 | 2/1 | 19 | 5.5e | 5.5e | -- | -- |
| +Tremewan Ranch | 15H8 | 5700 | 1/29 | 5 | 1.5 | 3.2 | 0.0 | 1.7* |
| Trout Creek - Upper | 15H11A | 8500 | 2/1 | 26 | 9.1e | 11.7e | -- | -- |

+ Located on adjacent drainage

e Aerial snow depth gage reading; water content estimated.

* 1948-62 adjusted average.

NEVADA SNOW SURVEYS FEBRUARY 1, 1965

| DRAINAGE BASIN AND SNOW COURSE | No. | Elev. (Ft.) | Date of Survey | 1965 | | P a s t R e c o r d | | |
|--------------------------------------|-------|----------------|----------------------|------------------------|---------------------------|---------------------|------|-----------------|
| | | | | Snow Depth (In.) | Water Content (In.) | Water Content (In.) | | 1948-62 Ave. |
| | | | | | | 1964 | 1963 | |
| <u>LOWER HUMBOLDT RIVER</u> | | | | | | | | |
| Granite Peak | 17H4 | 7800 | 1/28 | 48 | 17.0 | 6.2 | 6.8 | 7.5* |
| Martin Creek | 17H3 | 6700 | 1/28 | 29 | 10.0 | 5.5 | T | 5.8* |
| Midas | 16H3A | 7200 | 2/1 | 1 | .3e | 3.0e | -- | -- |
| Toe Jam | 16H7a | 7700 | 2/1 | 19 | 5.5e | 5.5e | -- | -- |
| Lower Corral | 17L2 | 7500 | 2/1 | 2 | 0.6 | 0.9 | -- | -- |
| Upper Corral | 17L1 | 8500 | 2/1 | 12 | 3.6 | 3.0 | -- | -- |
| <u>QUINN RIVER</u> | | | | | | | | |
| Denio Creek | 18G6a | 6000 | 2/1 | 0 | 0.0e | 0.7e | 0.0 | -- |
| Louse Canyon | 17G4a | 6440 | 2/1 | 3 | 1.0e | 1.4e | T | -- |
| Oregon Canyon | 17G5a | 7240 | 2/1 | 6 | 2.1e | 4.8e | T | -- |
| Quinn Ridge | 17H6a | 6300 | 2/1 | 6 | 2.1e | 1.7e | T | -- |
| Trout Creek | 18G3a | 7800 | 2/1 | 16 | 5.6e | 2.9e | 2.0e | -- |
| <u>LOWER COLORADO RIVER</u> | | | | | | | | |
| Mathew Canyon | 14M1 | 6000 | 2/1 | 0 | 0.0 | 0.4 | -- | 3.0* |
| Pine Canyon | 14M2 | 6200 | 2/1 | 2 | 0.9 | 1.7 | -- | 3.2* |
| <u>TAHOE</u> | | | | | | | | |
| Brockway Summit | 20K22 | 7100 | 2/2 | 53 | 20.1 | 8.6 | -- | -- |
| Daggetts Pass | 19L14 | 7350 | 1/29 | 34 | 12.7 | 5.0 | T | 8.0* |
| Echo Summit | 20L5 | 7500 | 2/1 | 103 | 42.7 | 19.9 | 7.1 | 23.1 |
| Freel Bench | 19L2 | 7300 | 2/1 | 41 | 17.0 | 8.3 | T | 8.6* |
| Glenbrook #2 | 19K6 | 6900 | 1/31 | 35 | 12.0 | 6.2 | 0.6 | 7.6* |
| Hagans Meadow | 19L3 | 8000 | 2/1 | 60 | 22.9 | 10.5 | 2.4 | 9.8* |
| Marlette Lake | 19K4 | 8000 | 1/29 | 52 | 19.0 | 9.9 | 1.6 | 12.7* |
| Richardsons #2 | 20L3 | 6500 | 1/31 | 48 | 17.9 | 10.2 | 1.0 | 11.1* |
| Tahoe City | 20K16 | 6250 | 2/2 | 32 | 13.4 | 9.9 | T | 8.4* |
| Upper Truckee | 19L1 | 6400 | 2/1 | 33 | 12.5 | 7.6 | T | 7.4* |
| Ward Creek | 20K17 | 7000 | 2/2 | 106 | 45.8 | 25.6 | T | 25.8* |

* 1948-62 adjusted average.

e Aerial snow depth gage reading; water content estimated.

NEVADA SNOW SURVEYS FEBRUARY 1, 1965

| DRAINAGE BASIN AND SNOW COURSE | | | SNOW COVER MEASUREMENTS | | | | | |
|---|----------------|-------|-------------------------|------------------------|---------------------------|--|------|-------|
| | | | Date of Survey | 1965 | | P a s t R e c o r d | | |
| | | | | Snow Depth (In.) | Water Content (In.) | Water Content (In.) 1948-62 Ave. | | |
| No. | Elev. (Ft.) | | | | | 1964 | 1963 | |
| <u>TRUCKEE RIVER</u> | | | | | | | | |
| Boca #2 | 20K14 | 5900 | 2/2 | 25 | 8.9 | 4.6 | 0.0 | 5.9* |
| Brockway Summit | 20K22 | 7100 | 2/2 | 53 | 20.1 | 8.6 | -- | -- |
| Donner Park #2 | 20K21 | 6000 | 2/2 | 42 | 15.4 | 12.1 | 0.0 | 11.2* |
| +Donner Summit | 20K10 | 6900 | 1/29 | 99 | 42.5 | 23.6 | T | 23.4 |
| +Fordyce Lake | 20K7 | 6500 | 1/26 | 78 | 29.6e | 25.6 | T | 23.1* |
| +Furnace Flat | 20K8 | 6600 | 1/26 | 107 | 40.5e | 30.2 | T | 26.2* |
| Independence Camp | 20K4M | 7000 | 2/4 | 61 | 24.3 | -- | -- | -- |
| Independence Creek | 20K3 | 6500 | 2/4 | 43 | 16.7 | -- | -- | -- |
| Sage Hen Creek | 20K6 | 6500 | 2/3 | 49 | 18.5 | 12.0 | 0.0 | 12.2* |
| Squaw Valley #2 | 20K19 | 7500 | 2/2 | 128 | 54.4 | 27.6 | T | 29.3* |
| Tahoe City | 20K16 | 6250 | 2/2 | 32 | 13.4 | 9.9 | T | 8.4* |
| Truckee #2 | 20K13 | 6400 | 2/3 | 50 | 18.4 | 10.0 | 0.0 | 10.5* |
| +Ward Creek | 20K17 | 7000 | 2/2 | 106 | 45.8 | 25.6 | T | 25.8* |
| <u>CARSON RIVER</u> | | | | | | | | |
| Carson Pass (Upper) | 19I4 | 8600 | 1/27 | 101 | 41.4 | 18.6 | 2.8 | 19.3 |
| Ebbetts Pass | 19L19a | 8700 | 2/1 | 84 | 31.8e | 17.6e | -- | -- |
| Wet Meadow Lake | 19L18a | 8100 | Marker | Down | | 12.6e | -- | -- |
| Poison Flat | 19L6A | 7900 | 2/1 | 36 | 13.7e | 6.7e | 1.5e | -- |
| Upper Fish Valley | 19L16a | 8050 | 2/1 | 27 | 10.3e | 5.0e | 3.0e | -- |
| Wolf Creek | 19I20a | 8000 | 2/1 | 92 | 35.0e | New Aerial Marker | | |
| <u>WALKER RIVER</u> | | | | | | | | |
| Center Mountain | 19L12A | 9400 | 2/1 | 84 | 29.4e | 11.7e | 6.5e | -- |
| Lobdell Lake | 19L17a | 9200 | 2/1 | 46 | 16.1e | 8.1e | -- | -- |
| Sonora Pass | 19L7 | 8800 | 1/28 | 74 | 28.1 | 11.7 | 1.9 | 13.0* |
| Tioga Pass | 19M1 | 9900 | 1/28 | 62 | 25.2 | 9.1 | -- | 16.2* |
| Virginia Lakes | 19L13 | 9500 | 1/27 | 56 | 18.5 | 7.6 | 0.4 | 10.7* |
| <u>WHITE MOUNTAINS</u> | | | | | | | | |
| Campito Mtn. | 18M2 | 10200 | 1/28 | 6 | 1.8 | 0.3 | 5.2 | 3.7* |
| Chiatovich Flat | 18M5a | 10500 | 2/1 | T | T | New Aerial Marker | | |
| Montgomery Pass | 18M1 | 7100 | 2/1 | 0 | 0.0 | -- | 0.0 | 0.8* |
| Pinchot Creek | 18M3a | 9300 | 2/1 | T | T | 0.4e | 0.0 | -- |
| Piute Pass | 18M4a | 11700 | 2/1 | T | T | 0.6e | 3.0e | -- |
| <u>NORTHERN GREAT BASIN (Surprise Valley)</u> | | | | | | | | |
| Barber Creek | 20H2 | 6500 | 1/28 | 41 | 14.5 | 8.6 | 1.4 | 7.6* |
| Cedar Pass | 20H6 | 7100 | 2/1 | 44 | 14.9 | 8.4 | 0.6 | 10.0 |
| Dismal Swamp | 20H3a | 7000 | 1/30 | 46 | 15.6e | 10.8e | 1.5e | 8.2* |
| 49-Mountain | 19H3 | 6000 | 1/29 | 16 | 5.9 | 3.7 | 0.0 | 3.5* |
| Hays Canyon | 19H2 | 6400 | 1/29 | 14 | 5.5 | 4.5 | 0.0 | 2.4* |
| Little Bally Mtn. | 19H4a | 6000 | 1/30 | 9 | 3.1e | 2.4e | 0.0 | -- |
| Reservation Creek | 20H1 | 5900 | 1/28 | 35 | 10.8 | 10.8 | 1.0 | 7.9* |

+ Located on adjacent drainage.

e Aerial snow depth gage reading; water content estimated.

* 1948-62 adjusted average.

NEVADA SOIL MOISTURE

February 1, 1965

| STATION | PROFILE (Inches) | | | SOIL MOISTURE (Inches) | | | |
|--------------------------|------------------|-------|----------|------------------------|-------|-------|-------|
| Name | Elevation | Depth | Capacity | Date | 1965 | 1964 | 1963 |
| <u>EAST SLOPE SIERRA</u> | | | | | | | |
| Hagans Meadow | 8000 | 36 | 3.65 | 2/2 | 3.50 | 2.97 | -- |
| Independence Camp | 7000 | 34 | 6.10 | 2/4 | 6.07 | -- | -- |
| Truckee #2 | 6400 | 18 | 3.65 | 2/3 | 3.65 | 2.80 | -- |
| Ward Creek | 7000 | 49 | 5.80 | 2/2 | 5.80 | 5.60 | 5.80 |
| <u>HUMBOLDT-OWYHEE</u> | | | | | | | |
| Big Bend | 6700 | 48 | 16.70 | 1/29 | 16.50 | 15.60 | 14.70 |
| Rodeo Flat | 6800 | 42 | 11.00 | 1/29 | 11.00 | 10.40 | 10.60 |

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

- Agricultural Research Service
- Army
- Bureau of Reclamation
- Fish and Wildlife Service
- Forest Service
- Geological Survey
- Navy
- Soil Conservation Service
- Weather Bureau

STATE

- California Cooperative Snow Surveys
- California Department of Water Resources
- Colorado River Commission of Nevada
- Nevada Association of Soil Conservation Districts
- Nevada Cooperative Snow Surveys
- Nevada Department of Conservation & Natural Resources
 - Division of Water Resources
 - Nevada State Forester-Firewarden
- Oregon Cooperative Snow Surveys
- University of Nevada
- White Mountain Research Station, Univ. of California

PRIVATE

- Amalgamated Sugar Company
- Kennecott Copper Corporation
- Nevada Irrigation District
- Owyhee Project North Board of Control
- Owyhee Project South Board of Control
- Pacific Gas & Electric Company
- Pershing County Water Conservation District
- Sierra Pacific Power Company
- Squaw Valley Development Company
- Truckee-Carson Irrigation District
- Virginia City Water Company
- Walker River Irrigation District
- Washoe County Water Conservation District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ROOM 6 -- 1479 SO. WELLS AVE.
RENO, NEVADA 89502

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with the Snow Survey"*